WHAT IS CLAIMED IS:

1   1.   For use in a wireless network, a method of providing

2   quality-of-service (QoS) functions to a mobile station accessing

3   the wireless network, the method comprising the steps of:

4   receiving from the mobile station a packet data call

5   initiation signal;

6   sending an authorization request corresponding to the

7   mobile station;

8   receiving an authorization message and quality-of-service

9   profile corresponding to the mobile station;

10   receiving application information corresponding to the

11   mobile station; and

12   determining quality-of-service parameters according to

13   the quality-of-service profile and the application information,

14   wherein the mobile station thereafter communicates according to the

15   quality-of-service parameters.

1   2.   The method of claim 1, wherein the packet data call

2   initiation signal is received in a base station controller.

1   3.   The method of claim 1, wherein the quality-of-service

2   profile is stored on an authorization server.

1   4.   The method of claim 1, wherein the quality-of-service

2   parameters are sent to a packet data serving node.

1   5.   The method of claim 1, wherein the application

2   information includes an application data class.

1   6.   The method of claim 1, wherein the quality-of-service

2   profile includes delay, maximum data rate, and data loss rate

3   information.

1   7.   The method of claim 1, wherein quality-of-service

2   parameters are determined by a quality-of-service control

3   component.

1   8.   A call management system comprising:

2   a QoS controller capable of receiving from a mobile

3 station a packet data call initiation signal and sending an

4 authorization request corresponding to the mobile station to an

5 authorization server, wherein the QoS controller receives from the

6 authorization server an authorization message and quality-of-

7 service profile corresponding to the mobile station, and wherein

8 said QoS controller is further capable of receiving application

9 information corresponding to the mobile station, determining

10 quality-of-service parameters according to the quality-of-service

11 profile and the application information, and transmitting a control

12 message to the mobile station capable of causing the mobile station

13 to communicate thereafter according to the quality-of-service

14 parameters.

1   9.   The call management system of claim 8, wherein the QoS

2 controller is a part of a base station controller.

1   10. The call management system of claim 8, wherein the

2 quality-of-service profile is stored on an authorization server.

1   11. The call management system of claim 8, wherein the

2 quality-of-service parameters are sent to a packet data serving

3 node.

1   12. The call management system of claim 8, wherein the

2   application information includes an application data class.

1   13. The call management system of claim 8, wherein the

2   quality-of-service profile includes delay, maximum data rate, and

3   data loss rate information.

1   14. The call management system of claim 8, wherein the QoS

2   controller determines the quality-of-service profile using a

3   quality-of-service control component.

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1   15.   A wireless network comprising:

2   a plurality of base station capable of communicating with

3   a plurality of mobile station, wherein at least one of the

4   plurality of base stations comprises:

5   a QoS controller capable of receiving from a mobile

6   station a packet data call initiation signal and sending an

7   authorization request corresponding to the mobile station to

8   an authorization server, wherein the QoS controller receives

9   from the authorization server an authorization message and

10   quality-of-service profile corresponding to the mobile

11   station, and wherein said QoS controller is further capable of

12   receiving application information corresponding to the mobile

13   station, determining quality-of-service parameters according

14   to the quality-of-service profile and the application

15   information, and transmitting a control message to the mobile

16   station capable of causing the mobile station to communicate

17   thereafter according to the quality-of-service parameters.

1   16.   The wireless network of claim 15, wherein the QoS

2   controller is a part of a base station controller.

1   17.   The wireless network of claim 15, wherein the quality-of-

2   service profile is stored on an authorization server.

1   18.   The wireless network of claim 15, wherein the quality-of-

2   service parameters are sent to a packet data serving node.

1   19.   The wireless network of claim 15, wherein the application

2   information includes an application data class.

1   20.   The wireless network of claim 15, wherein the quality-of-

2   service profile includes delay, maximum data rate, and data loss

3   rate information.

1   21.   The wireless network of claim 8, wherein QoS controller

2   determines the quality-of-service profile using a quality-of-

3   service control component.